



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D4012-1
Job Sheet 187076



Part No: D4012-1

Job Qty: 200 ea **203 CB**

Part Name: Cushion



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/27/18

Job Tracking No:

Due Date: 12/18/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV E SHEET 1

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Lead Time	Start-off 2019
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time		
100	Purchasing	200 pcs		12/18/18	0.00	0.00	Purchasing			JAN 11 2019
110	Packaging	200 pcs		12/18/18	0.00	0.00	Packaging2			JAN 11 2019
120	QC	200 pcs		12/18/18	0.00	0.00	QC6			JAN 11 2019
130	Packaging	200 pcs		12/18/18	0.00	0.00	Packaging3-2			JAN 11 2019
140	QC21-SA	200 Ea		12/18/18	0.00	0.00	QC21			JAN 11 2019

Part Op 100 - Mill as per folio FA889 Dwg. rev: _____
Descriptions:

PO Details

Garland Manufacturing Co. (gar001-vu)



PO No: PO041876

Line No: 1

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D4012-1F NOV 29 2018	Cushion	200 pcs (1 ea)	100-Purchasing	S144162

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	D4012-1F	200	0	0



Container No: S144171



Part: D4012-1

Job No: 187076

Serial No/Batch: S144171

Revision:

Inspector:

Exp Date:

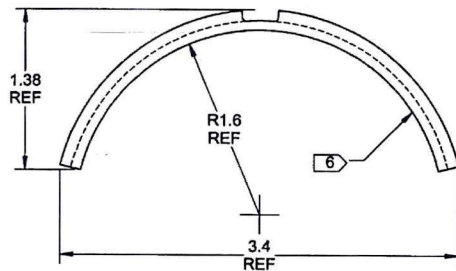
Instructions: Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Plex 11/29/18 10:31 AM dart.lavoie.chantal

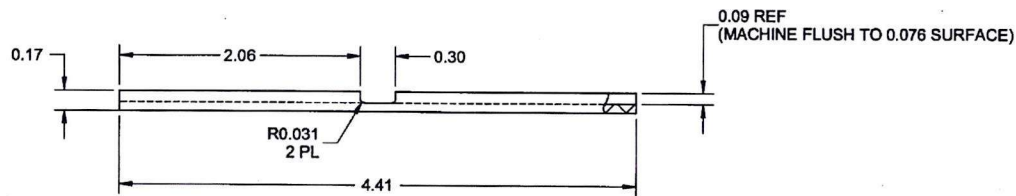
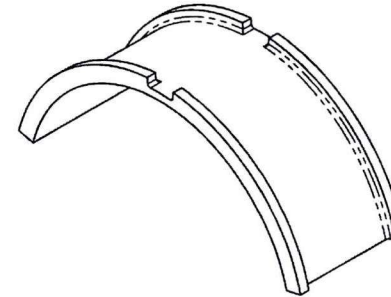
Part Specifications					
Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Cushion	1.250Inches $\pm$ 0.030	1.280 1.220		
2	Cushion	1.050Inches $\pm$ 0.010	1.060 1.040		
3	Cushion	0.100Inches $\pm$ 0.030	0.130 0.070		
4	Cushion	4.410Inches $\pm$ 0.030	4.440 4.380		
5	Cushion	0.076Inches + 0.015 - 0.000	0.091 0.076		
6	Cushion	0.170Inches $\pm$ 0.030	0.200 0.140		
7	Cushion	0.031Inches $\pm$ 0.010	0.041 0.021	Radius	
8	Cushion	0.300Inches $\pm$ 0.030	0.330 0.270		

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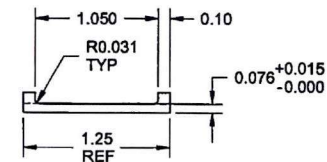


D4012-1 CUSHION
(MAKE FROM D4012-1F)
(COLD FORMED DURING INSTALLATION, DIMS REFERENCE ONLY)

SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 187076
 18712



D4012-1F FLAT CUSHION ①



NOTES:

- 1) MATERIAL: MAKE FROM D4287-3 OR VIRGIN GAR-DUR UHMW-PE, NATURAL, (GARLAND MANUFACTURING COMPANY)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.02 lbs

E	ADD PURCHASING OPTION- NEW SUPPLIER, CIR 18-69	DB	16.05.09
D	ADDED -3 SEE PAR 15-458.	AJS	15.09.17
C	ADD 0.30 NOTCH, 2 PL, ADD COLD FORM NOTE, REF DIMS FOR D4012-1 REASON: PAR 14-331, NCR 14-3521	DB	14.09.22
B	CHANGED RAW MATERIAL TO REDUCE MANUFACTURING COSTS; PART NOW MACHINED FLAT AND SHAPED WITH RADIUS. REF: PAR10-29	MB	10.12.07
A	NEW ISSUE	MB	09.10.19
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	ML	DRAWING NO. D4012 REV. E SHEET 1 OF 2	
MFG. APPR.	DD		
APPROVED	WM	TITLE CUSHION SCALE NTS	
DE APPR.	DS		
DATE	16.05.09	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED

2016-11-09

ECW16-668

APPROVED



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041876

Supplier: GAR001-VU
Garland Manufacturing Co.
P.O. Box 538
Saco, ME 4072 USA
Phone: 207-283-3693
Fax: 207-283-4834

PO No: PO041876

PO Date: 11/28/18

Due Date: 1/4/19

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

REUSEH

E-MAILED

NOV 29 2018

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	187076	D4012-1F		Cushion : Various STC's As per Dwg 4012 Rev. E	Firmed	-	1/4/19	200 pcs	0 pcs	200 pcs	\$2.64/pcs	\$528.00

Line Item Note AS PER DWG D4012 REV. E

Grand Total: \$528.00

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

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GARLAND MFG COMPANY
P.O. BOX 538
SACO, ME 04072
(207) 283-3693

GAR-DUR PLASTIC

RAWHIDE
MALLET AND HAMMERS

Shop Floor Copy

Order Number: 0196358

Order Date: 11/30/2018

Salesperson: 71F

Customer Number: 30-0615903

Sold To:

DART AEROSPACE OEM
1270 ABERDEEN STREET
HAWKESBURY, ON K6A1K7

Ship To:

DART AEROSPACE OEM
1270 ABERDEEN STREET
CHANTEL LAVOIE
HAWKESBURY, ON K6A1K7

Confirm To:

Customer P.O.	Ship VIA	Requested Date	Terms
PO41876 ✓	UPS COLLECT 6645W1	1/8/2019	Net 30 Days
Product Code	Description	Units	UOM
310001	FABRICATED PART	200.00 ✓	EACH
PN: D4012-1F TO DWG: 4012 REV E SEE JG FOR SPECIAL CERTS PROCUREMENT QUALITY CLAUSES A005,A007,A012,A016,A017,A026,A041,A042,A043,A048,A049 EMAIL			

DAS
38
3-89

PACKING LIST

Approx WT: 0.00			
Date Shipped	BDL or Carton	Weight	Quantity
1/7/19	1	6	200 PCS



Industrial Plastics
Ultra-High Molecular Weight Polyethylene

55 Industrial Park Road
POB 538
Saco, Maine 04072

Specialty Striking Tools
Garland Rawhide Hammers & Mallets

PH: 207/283-3693
FX: 207/283-4834
<http://www.garlandmfg.com>

Dart Aerospace
Attn: Linda Lacelle
1270 Aberdeen St.
Hawkesbury, ON K6A1K7
Re: PO #041876 Quality Clauses A017 and A026
Date: January 7, 2019

Linda:

A026

Please be advised that Garland Manufacturing, located in Saco, Maine, USA, hereby certifies that the material provided by this company for your PN: D4012-1F on PO # 041876 meets or exceeds ASTM Specification D-4020-05a, the current ASTM specification for Ultra-High Molecular Weight Polyethylene; also known as UHMW or UHWM-PE. Garland Mfg. Company only processes UHMW-PE material at the upper end of the molecular weight range. Our virgin GAR-DUR® UHMW plastic is made from resin with an I.V. of 24 and above with a minimum molecular weight of 4.2 million.

A017

Your parts were produced from the following Resin Lot:

Celanese resin GUR 4152 Batch #0001084471, Rail car : ACFX040639 , See attached Quality Certificate

Best Regards,

James Garland
Garland Manufacturing Company
jgarland@garlandmfg.com
800/727-1900 x 45



GARLAND MANUFACTURING
55 INDUSTRIAL PARK RD
SACO ME 04072
USA

Bill Kramer
Phone: 207-283-3693
Fax: 207-283-4834

Bishop, TX - Ticona
Ticona Polymers
5738 County Road 4
Business 77 South
BISHOP TX 78343
USA

Type 2 Certificate of Analysis

GUR 4152 B RC (W4)

Formula No.: GUR 4152
Catalog: 20003859
Color No.: NATURAL
Produced at: Bishop, TX, USA

Cert Issue Date: 19 Jul 2018
Qty Shipped: 126,750.000 LB
Order Item /date: 1947288 30 / 16 Jan 2018
Delivery item/date: 85720939 30 / 16 Jul 2018
Account #: 2067442
Customer PO No.: 26604
Rail car: ACFX040639

Batch 0001084171

In reference to the above, this is to advise you that this is a standard product and meets the following requirements:

BATCH RELEASE DATA	UoM	Value
Intrinsic Viscosity	decltr/gm	28
Bulk density	g/cm ³	0.49
Extraneous Material		0
Particle Size > 500 μ m	%(m)	0
Particle Size < 63 μ m	%(m)	2
Particle Size (D50)	μ m	176
Calcium Stearate	ppm(m)	624

These test data are determined based on standard ISO and/or ASTM testing procedures.

GUR Global Business Line

If you have questions regarding this letter, please call your Customer Service Team at 800-526-4960.